Date: Thu, 16 Sep 93 04:30:19 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V93 #48
To: Ham-Ant

Ham-Ant Digest Thu, 16 Sep 93 Volume 93 : Issue 48

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

Date: 15 Sep 93 16:16:31 GMT
From: ogicse!hp-cv!hp-pcd!hpcvsnz!tomb@network.ucsd.edu
Subject: Antenna switches and frequency
To: ham-ant@ucsd.edu

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: Note that the center conductor of a BNC and a type N are identical.
: And note that the contact ring of a BNC and a type N are identical.
: The only mechanical difference is that the N uses a large screw on
: collar while the BNC uses a smaller quarter twist collar. In fact,
: you can plug a N male connector into a BNC female. The only problem
: is that you can't lock it into place. (You shouldn't do this because
: it's easy to misalign and that will ruin the center receptacle of
: the BNC female.)

OK, sometimes I agree and sometimes I don't. Look more closely at
the center conductors of an N and a BNC. The mating diameters
are NOT the same, and the N assumes an air dielectric in the
mating area, where the BNC is has sleeves of insulation, so the
center conductor of the N connector is larger there. If you mate

an N male to a BNC female, the female could be stretched to the point
of damage, and I can about guarantee that you won't have a constant
impedance connection. The BNC can be ruined even if you align
things properly, because they really are NOT the same.

: Anyway, since current is limited by the center contact resistance,
: and they can be the same, and voltage is limited by dielectric materials,
: and those can be the same, a BNC can handle as much power as a N
: connector. This isn't usually done because BNCs are typically used
: on smaller cables than N connectors, but there are BNC connectors
: for larger cables such as RG-213. There is a difference in thermal
: mass of the outer shells of the two types, but that's not the
: critical limit, the center contact and dielectric are the critical
: limits.

Although I agree that the voltage is limited by things like spacing,
materials and dimensions, and at first blush since the center
conductor of the N connector is larger than the center conductor
of the BNC you would think that it would have a lower voltage rating
if anything (less space between center and outer, but darned near the
same), the _manufacturers'_ratings_ show 1000 volts for the N and
500 for the BNC. I would not suggest that a connector be applied
beyond its ratings except in an emergency. (Note that both Kings
and Amphenol also rate the max contact resistance lower for the N
than for the BNC.)

But as I've posted in another response in this thread, hams are
unlikely to be connector limited; the coax is much more likely to
be the limit, where RG-213 size (including 9913, etc.) and smaller,
and polyethelene dielectric, is used.

Date: Tue, 14 Sep 93 23:39:57 GMT
From: btree!hale@network.ucsd.edu
Subject: G5RV
To: ham-ant@ucsd.edu

In article <747773205snx@skyld.tele.com> jangus@skyld.tele.com (Jeffrey D. Angus)
writes:

[a bunch of stuff regarding whether two coaxes operated in differential
mode have an impedance of 2Z or 4Z deleted]

When I see this much blind faith in the wrong answer, I become quite
discouraged. Some of you know what you are talking about, and some
of you don't but think that you do. Aaaaargh!

Bob Hale ...!ucsd!btree!hale
...!hale@brooktree.com (preferred)

Date: 14 Sep 1993 22:22:10 -0400
From: news.centerline.com!noc.near.net!news.delphi.com!news.delphi.com!not-for-mail@uunet.uu.net
To: ham-ant@ucsd.edu

References <m8pq14INN2l1@news.bbn.com>, <CD1ts0.Mzx@srgenprp.sr.hp.com>, <1993Sep14.024258.18728@trl.oz.au>efsd.com
Subject : Re: G5RV

djewell@rhea.trl.OZ.AU (David Jewell - Radio and Satellite Networks) writes:

>Now that everyone has absolutely squashed my childhood belief in the
>G5RV (down the same trail as the Easter Bunny and the Tooth Fairy) what
>am I to do now. Having recently (2 years ago) moved to a new QTH in a
>David... (VK3DAJ)

Yes, Yes, Yes. All you need to radiate twice the energy or more is ladder-line and a balanced antenna tuner. Throw away your coax and bring your 450 (best) or 300(ok) ohm ladder line all the way to a balanced antenna tuner. I don't know if a balun can do the job of a balanced antenna tuner. W2FMI says we can have virtually lossless baluns, and if so we can use an un-balanced antenna tuner into a "virtually lossless balun" and accomplish the same thing. I don't understand baluns all that well so I use a balanced antenna tuner. Jerry, if you are listening, jump in here and give us the benefit of your knowledge. Question: Is an unbalanced antenna tuner plus a virtually lossless balun equivalent to a balanced antenna tuner? TNX in advance, Cecil, KG7BK

End of Ham-Ant Digest V93 #48
****